

Appl. No. 09/881,229
Amdt. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/J/P/04-3275

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Previously Presented) The method according to Claim 3, wherein said determining step comprises said base transceiver station determining that contact has been lost between said base transceiver station and said primary base station controller.
3. (Previously Presented) In a mobile telecommunications system that includes a plurality of base station controllers, a method for handling a base transceiver station that has become orphaned as a result of a loss of a primary base station controller that normally controls the base transceiver station, the method comprising:
 - determining that contact has been lost between said base transceiver station and said primary base station controller, wherein said base transceiver station includes a memory having a list identifying base station controllers by which said base transceiver station is willing to be controlled;
 - identifying a secondary base station controller from among said plurality of base station controllers to adopt said base transceiver station, said base transceiver station contacting base station controllers identified in said list one at a time until said secondary base station controller is identified; and
 - effecting a handover of said base transceiver station from said primary base station controller to said secondary base station controller.
4. (Original) The method according to Claim 3, wherein said list is a prioritized list, and wherein said base transceiver station contacts base station controllers identified in said list one at a time in order of priority.

Appl. No. 09/881,229
Amdt. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/J/P/04-3276

5. (Original) The method according to Claim 4, wherein said primary base station controller is the base station controller identified in said prioritized list which is of highest priority.

6. (Original) The method according to Claim 3, and further including the step of said base transceiver station waiting a period of time after determining that contact has been lost between said base transceiver station and said primary base station controller before contacting base station controllers identified in said list.

7. (Original) The method according to Claim 6, wherein said step of waiting a period of time comprises waiting a first fixed period of time and thereafter waiting a second random period of time.

8. (Original) The method according to Claim 2, wherein said identifying step includes said base transceiver station sending a broadcast message to said plurality of base station controllers.

9. (Original) The method according to Claim 8, wherein said plurality of base station controllers comprises all base station controllers in a base station system of said mobile telecommunications system.

10. (Original) The method according to Claim 8, and further including the step of said base transceiver station waiting a period of time after determining that contact has been lost between said base transceiver station and said primary base station controller before sending said broadcast message.

11. (Original) The method according to Claim 10, wherein said period of time includes a first fixed period of time and up to a second random period of time.

Appl. No. 09/881,229
Amdt. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/J/P/04-3275

12. (Original) The method according to Claim 11, and further including the step of said base transceiver station waiting up to a third period of time after sending said broadcast message for a response thereto, and repeating the step of sending a broadcast message if a response is not received within said third period of time.

13. (Original) The method according to Claim 2, wherein said identifying step includes said base transceiver station contacting a sub network manager of said mobile telecommunications system, and wherein said step of effecting a handover includes said sub network manager initiating said handover.

14. (Original) The method according to Claim 13, wherein said identifying step comprises said sub network manager contacting one or more of said plurality of base station controllers to identify said secondary base station controller.

15. (Original) The method according to Claim 13, wherein said identifying step comprises said sub network manager ordering one of said plurality of base station controllers to be said secondary base station controller.

16. (Previously Presented) The method according to Claim 3, wherein said determining step comprises a base station controller of said plurality of base station controllers determining that contact has been lost between said base transceiver station and said primary base station controller.

17. (Original) The method according to Claim 16, wherein each base station controller of said plurality of base station controllers sends a broadcast message to others of said plurality of base station controllers, and wherein each base station controller includes timers which time the broadcast messages sent from said others of said base station controllers, and wherein said determining step includes determining that contact has been lost between said base transceiver station and said primary base station controller when a timer associated with said primary base station controller

Appl. No. 09/881,229
Amdt. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/J/P/04-3275

expires without a message having been received from said primary base station controller.

18. (Original) The method according to Claim 17, wherein said others of said plurality of base station controllers comprise predetermined ones of said plurality of base station controllers.

19. (Previously Presented) The method according to Claim 3, wherein said mobile telecommunications system includes a sub network manager, and wherein said determining step comprises said sub network manager determining that contact has been lost between said base transceiver station and said primary base station controller.

20. (Original) The method according to Claim 19, wherein said identifying step comprises said sub network manager contacting one or more of said plurality of base station controllers to identify said secondary base station controller.

21. (Previously Presented) The method according to Claim 3, and further including the step of said primary base station controller readopting said base transceiver station when contact is able to be reestablished between said base transceiver station and said primary base station controller.

22. (Original) The method according to Claim 21, wherein said readopting step comprises said base transceiver station requesting read option of said primary base station controller.

23. (Original) The method according to Claim 21, wherein said read option step comprises said base transceiver station advising said secondary base station controller that it wishes to be readopted by said primary base station controller.

Appl. No. 09/881,229
Amdt. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/JIP/04-3275

24 - 25. (Canceled)

26. (Currently Amended) A mobile telecommunications system comprising:

a base station system, said base station system including a plurality of base station controllers, each of which controls at least one base transceiver station wherein said at least one base transceiver station includes a memory for storing a list identifying base station controllers by which said base transceiver station is willing to be controlled;

a determiner that determines whether contact has been lost between a base transceiver station and a primary base station controller that normally controls said base transceiver station;

an identifier, coupled to said at least one base transceiver station for identifying a secondary base station controller from among said plurality of base station controllers to adopt said at least one base transceiver station, said at least one base transceiver station contacting said plurality of base station controllers, identified in said list, one at a time until said secondary base station controller is identified;

a pointer which points to an element in said list to identify a potential secondary base station controller, and identifies a secondary base station controller of said plurality of base station controllers to adopt said base transceiver station, wherein said identifier includes a transmitter in said base transceiver station for transmitting a broadcast message to said plurality of base station controllers and a receiver in said plurality of base station controllers for receiving a response to said broadcast message; and

handover means for handing over said base transceiver station from said primary base station controller to said secondary base station controller.

27. (Previously Presented) The mobile telecommunications system according to Claim 26, wherein said determiner includes a transmitter in said primary base station controller for transmitting a broadcast message to others of said plurality of base station controllers, and wherein said others of said plurality of base station

Appl. No. 09/881,229
Amtd. Dated November 19, 2004
Reply to Office action of August 25, 2004
Attorney Docket No. P14395-US1
EUS/J/P/04-3275

controllers include a receiver for receiving said broadcast message and a timer for determining that said broadcast message has not been received in a period of time.

28. (Previously Presented) The mobile telecommunications system according to Claim 26, wherein said base station system further includes a sub network manager, and wherein said determiner is in said sub network manager.